

What You Can Expect from a State-Certified Lead Abatement Company

What is Abatement?

According to Michigan's lead laws (MCL 333.5451-5477) abatement means *an activity designed to permanently eliminate lead paint hazards*. Abatement includes any of the following:

- C The removal of lead paint and lead-contaminated dust; the permanent enclosure (barrier) or encapsulation (special paint coating) of lead paint; the replacement of lead-painted surfaces or fixtures; the removal or covering of lead-contaminated soil; and any preparation, cleanup, disposal, and post-abatement clearance testing associated with these activities.
- C A project for which there is a contract indicating that a company will be performing work on a housing unit, day care center, preschool, or kindergarten that is designed to permanently remove lead paint hazards.
- C A project resulting in the permanent removal of lead paint hazards, conducted by a certified abatement company.
- C A project resulting in the permanent removal of lead paint hazards, conducted by a company who, through its name or promotional literature, represents, or advertises to be in the business of performing lead paint activities.
- C A project resulting in the permanent removal of lead paint hazards that is conducted in response to a state or local government lead abatement order, as in the case of a lead poisoned child.

What is Not Abatement?

The legal definition of abatement does not include any of the following:

- C Renovation, remodeling, landscaping, or other activity, if the activity is not designed to permanently eliminate lead paint hazards, but is instead designed to repair, restore, or remodel a structure, or housing unit even though the activity may incidentally result in a reduction or elimination of a lead paint hazard.
- C An operation and maintenance activity, or other measure or activity designed to temporarily, but not permanently, reduce a lead paint hazard.
- C Any lead paint activity performed by the owner of an owner-occupied housing unit or multifamily structure containing 4 or fewer units, if the activity is performed only in that owner-occupied unit of the multifamily structure.

Although the above are not regulated as abatement activities, if done without careful dust control by using wet methods and HEPA-filtered vacuums, these activities do create lead dust hazards.

Who Can Perform Abatement Activities in Michigan?

Only an individual certified by the Department of Community Health as an Abatement Supervisor or Abatement Worker who is working for a certified abatement company can perform abatement activities. A person should be able to present a card from the Lead Hazard Remediation Program indicating that he or she is certified as an Abatement Supervisor or Abatement Worker. The card shows the expiration date of the certification. The certification status of any individual can also be verified by contacting the Program at (517)335-9390 or toll-free (866)691-LEAD. In addition, this information is listed on the Program's website at www.michigan.gov/mdch with links Physical Health and Prevention, Prevention, and Lead Poisoning.

An Abatement Supervisor is required for each abatement project, and must be at the project site while all abatement work is being set up, performed, and cleared.

It is the responsibility of the Abatement Supervisor and the employing company to ensure that all abatement activities are performed within the requirements of state, federal and local laws.

The Abatement Supervisor must create a written occupant protection plan for all abatement projects according to the following:

- C The occupant protection plan must be specific to each housing unit, day care center, preschool or kindergarten class, and be created before the abatement project begins.
- C The occupant protection plan must describe what will happen during the abatement project to protect the occupants from exposure to any lead paint hazards.

The occupant protection plan must be provided to the occupants prior to the start date of the abatement project.

What Kind of Work Practices are Allowed and Prohibited During an Abatement Project?

The Abatement Supervisor must ensure that none of the following hazardous activities occur during an abatement project:

- C Open-flame burning or torching of lead paint.
- C Machine sanding, grinding, abrasive blasting and sandblasting of lead paint is prohibited, unless it is performed with equipment that incorporates the use of a HEPA (high-efficiency particulate air) filter that removes most of the lead particles created by the activity.
- C Dry scraping of lead paint is permitted only when using heat guns; around electrical outlets; or when treating defective paint spots totaling no more than 2 square feet in any 1

- room, hallway, or stairwell or totaling no more than 20 square feet on exterior surfaces.
- C Using a heat gun on lead paint is permitted only if the temperature setting is below 1100 degrees Fahrenheit.

If abatement involves encapsulation, it must be done using an encapsulant paint product approved by the Program and must be applied following the manufacturer's instructions. When the encapsulant has cured after several days, the abatement company must return to perform a test to ensure that the encapsulant will hold up. The test is called an adhesion test or "X" test.

If soil abatement is performed, it must be done in either of the following ways:

- C If soil is removed, the soil must be replaced with soil that is not contaminated with lead.
- C If soil is not removed, it must be permanently covered by a barrier made of solid impenetrable material, such as pavement or concrete.

Although grass, mulch and landscaping materials are not considered permanent barriers or abatement methods, they are cheaper alternatives to those above. If prepared properly, they can be very effective as a longer-term solution to preventing lead exposure to young children (six years of age and under). Rototilling the soil, laying landscaping fabric, and then wood chips, stone, soil or sod is an effective method to treat leaded soil; however, not a permanent fix.

The abatement company employees must use abatement methods that are approved by the U.S. Department of Housing and Urban Development (HUD) and/or the U.S. Environmental Protection Agency (EPA). The current references are the following, which can be obtained from the Lead Hazard Remediation Program:

- C HUD publication, *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.
- C EPA publication, *Guidance on Residential Lead-Based Paint, Lead-Contaminated Dust, and Lead-Contaminated Soil*.
- C EPA publication, *Residential Sampling for Lead: Protocols for Dust and Soil Sampling*, report number EPA 747-R-95-001.
- C American Society for Testing and Materials (ASTM) publication, *Standard Practices for Field Collection of Soil Samples for Lead Determination by Atomic Spectrometry Techniques*, standard number E1727.
- C ASTM publication, *Standard Practices for Field Collection of Settled Dust Samples Using Wipe Sampling Methods for Lead Determination by Atomic Spectrometry Techniques*, standard number E1728.

Containment of the Work Area

Containment of the work area is a very important process of the abatement job. It ensures that lead dust does not move into other areas of the building. Containment is the process of sealing clear plastic sheeting over all doorways, air ducts, furniture and other areas in a room or work

space. Containment must remain intact during the project and until after clearance dust testing is completed within and outside of the abatement work area.

What is Clearance Testing, Why is it Required, and How is it Done?

According to Michigan's lead laws, dust clearance testing is required after any abatement activity is completed on the interior of a housing unit or childcare building. Dust is tested from specific places to ensure that abatement activities have not created lead dust hazards that can poison young children, other occupants or pets living in the building. Test results are then compared with standard clearance lead levels listed in Table I, which are considered to be safe for reoccupation.

Clearance testing of soil abatement projects is not a requirement of Michigan law; however, replacement soil must not exceed the hazardous lead levels in Table I.

Only a certified Lead Inspector or Risk Assessor can perform clearance testing after abatement projects are completed. Certified Clearance Technicians cannot clear abatement projects at this time, but they can clear renovation and remodeling projects.

Only a certified Lead Inspector or Risk Assessor who is completely independent of the abatement company and project workers can perform clearance testing.

A visual inspection is performed first to determine if deteriorated painted surfaces or visible dust, debris, or residue is still present. If any of these are present, the Abatement Supervisor must make certain that these conditions are fixed before continuing clearance procedures.

After the visual inspection and any post-abatement cleanup that may be needed, the Lead Inspector or Risk Assessor must perform clearance lead sampling for dust and soil (if needed). Clearance should be done based upon how the abatement activities were conducted on the property. All of the following apply to clearance sampling:

- C After performing an abatement project within a containment area of 4 or more areas (rooms, hallways and stairwells), the individual must take, at a minimum, dust samples from 1 window (if available) and 1 floor location in 4 or more areas (rooms, hallways and stairwells) inside the containment. In addition, 1 dust sample must be taken from the floor outside the containment area. If the containment area is made up of 3 areas (rooms, hallways and stairwells) or less, the individual must take, at a minimum, dust samples from 1 window (if available) and 1 floor location of each of the 3 areas.
- C After performing an abatement with no containment, the individual must take, at a minimum, dust samples from 1 window (if available) and 1 floor location of 4 or more areas (rooms, hallways and stairwells) selected within the whole housing unit. If the unit has only 3 areas (rooms, hallways and stairwells) or less, the individual must take, at a minimum, dust samples from 1 window (if available) and 1 floor location of each of the 3 areas.

- C The individual must take dust samples for clearance using standard lead sampling methods or instructions.
- C The individual must take dust samples for clearance a minimum of 1 hour after final post-abatement cleanup activities are completed.
- C The individual must select the rooms, hallways, or stairwells for sampling using standard lead sampling methods or instructions.

The individual must compare the dust sample results from the laboratory with state-approved clearance levels in Table I for lead in dust on floors and windows. If the dust sample results are above the clearance levels, then the abatement company must clean, and the individual must retest all the areas where the dust sample results were higher than the clearance levels. This must be done until the dust sample results are under the clearance levels.

Immediately following an exterior paint abatement, the Abatement Supervisor must conduct a visual inspection of the outdoor area closest to the abated surfaces to ensure that visible dust and debris have been removed. The visual inspection includes looking for any paint chips on the dripline or next to the foundation below any exterior surface abated. If paint chips are present, the abatement company must remove the chips and debris from the site and properly dispose of them. No dust clearance testing is required for abatement projects on the exterior of a building.

In multifamily housing that has similarly constructed and maintained units, a Lead Inspector or Risk Assessor can conduct random sampling for the purposes of clearance. Random sampling involves selecting a number of individual units to perform clearance testing on, without having to clear every individual unit. This can only be done if:

- C The abatement company workers do not know which units will be selected for the random samples, and
- C A sufficient number of units are selected for dust sampling to assure that no more than 5% or 50 of the units, whichever is smaller, in the randomly sampled group do not meet the clearance levels, and
- C The randomly selected units are sampled and evaluated for clearance according to proper methods.

Clearance dust samples must be analyzed for lead by a laboratory approved by the EPA. Laboratory approval can be confirmed by visiting the Michigan Department of Community Health website or the American Industrial Hygiene Association website at www.aiha.org or by contacting the Lead Hazard Remediation Program toll-free at (866)691-LEAD.

According to Michigan law, lead detection test kits cannot be used for dust clearance testing or soil testing. These kits include swabs, sticks or liquid drops that turn color when they come in contact with surfaces that contain lead.

What is in the Abatement Report That I Should Receive at the End of the Project?

An Abatement Supervisor must write an abatement report at the completion of each abatement project. The report must include all of the following information:

- C Start and completion dates of the abatement project.
- C The name and address of each certified person performing the abatement project, and the name of each Abatement Supervisor assigned to the abatement project.
- C The occupant protection plan.
- C The name, address, and signature of each certified Risk Assessor or Inspector performing clearance sampling and the date of the sampling.
- C The locations and results of clearance dust testing and soil analyses (if any), and the name of each laboratory that analyzed the samples.
- C A detailed description of the abatement project, including:
 - C Abatement methods used.
 - C Locations of rooms and components where abatement took place.
 - C Reason for selecting particular abatement methods for each component.
 - C Any suggested monitoring of encapsulants or enclosures.

According to Michigan law, the abatement project report must be provided to the property owner who contracts the service. The abatement company conducting the project must keep a copy of the report on file for a minimum of three years.

The results of the clearance testing will be listed as numbers with units of measurement; the units are different for dust and soil. EPA and HUD regulations define clearance lead levels with the values and units of measurement shown in Table I.

TABLE I: Hazardous Lead Levels and Units of Measurement	
Material Tested	Clearance Lead Levels
Bare soil (child play areas)	less than 400 parts of lead per million parts of soil (ppm) — not a clearance level, but considered safe
Bare soil (other areas)	less than 1200 ppm of lead — not a clearance level, but considered safe
House dust (floors)	less than 40 micrograms of lead per square foot of sampled surface area (ug/ft ²)
House dust (window sills)	less than 250 ug/ft ² of lead
House dust (window troughs)	less than 400 ug/ft ² of lead

Additional Information

Complaints about improper work practices can be filed by calling the Lead Hazard Remediation Program staff toll-free at (866)691-LEAD or (517)335-9390.

The Program's website address is www.michigan.gov/mdch with links Physical Health and Prevention, Prevention and Lead Poisoning.

The mailing address is Michigan Department of Community Health, Lead Hazard Remediation Program, P.O. Box 30195, Lansing, Michigan, 48909.